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What is in a name?

QUESTION: A 28-year-old African American man is concerned about a rash that he has had on his body on and off for many years. He denies any pain or itching in association with the rash, although it is more pronounced in the summer months and when he is sweating. The patient is otherwise well. He states that he is in a monogamous heterosexual relationship and practices safe sex.

Physical examination reveals hypopigmented macules on the chest, upper arms, and back, some of which have coalesced into larger hypopigmented areas. Close visual inspection shows that there is a light scale over the macules. There are no lesions in the mouth or on the hands, feet, or genitals.

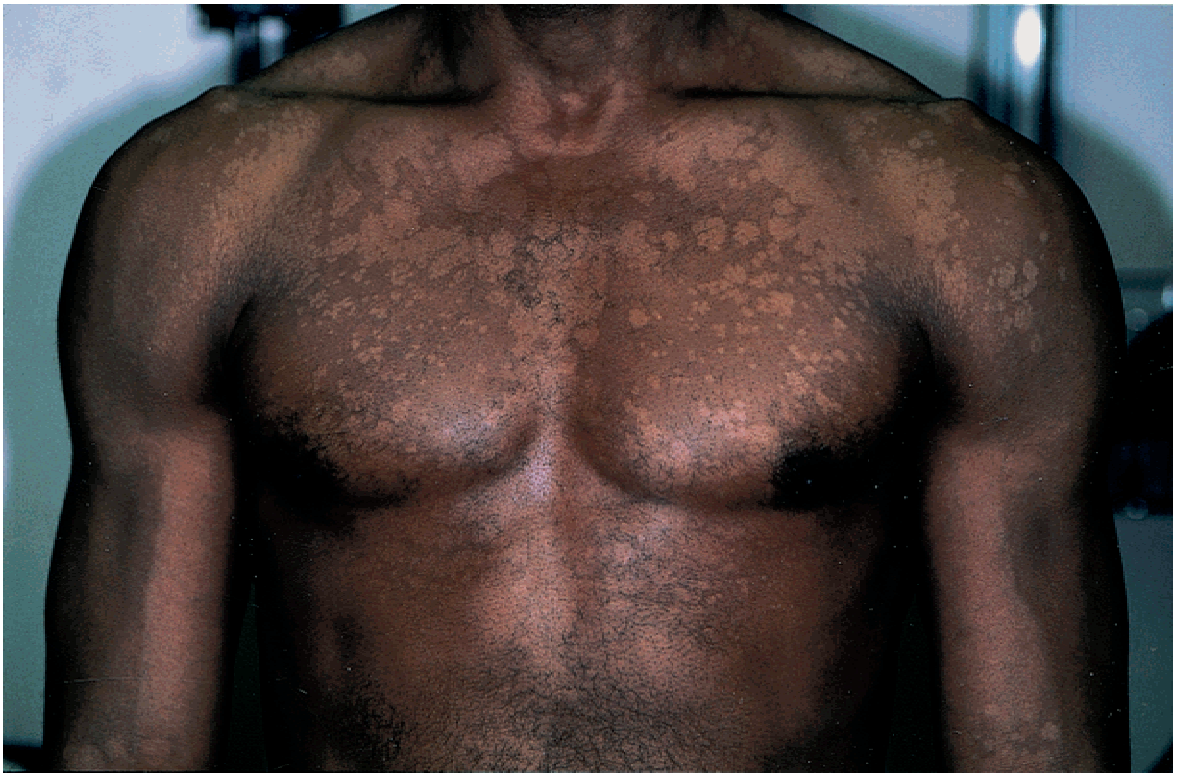
What is the differential diagnosis, and what further tests would help you make the diagnosis?

Richard P Usatine
University of California, Los Angeles
200 UCLA Medical Plaza, Ste 220
Los Angeles, CA 90095-1628

Correspondence to:
Dr Usatine
rusatine@ucla.edu

Competing interests: None declared

West J Med 2000;173:231-232



ANSWER: The differential diagnosis includes tinea versicolor, vitiligo, pityriasis rosea, and secondary syphilis. With the use of a microscope slide, scale from the macules was scraped to a second slide. Potassium hydroxide (KOH) with dimethyl sulfoxide was placed on this slide and covered with a coverslip. Microscopic examination revealed the typical "spaghetti and meatballs" pattern of tinea versicolor. The spaghetti represents broken hyphae and the meatballs are the spores of *Pityrosporum ovale*.

DISTRIBUTION AND TERMINOLOGY

Pityrosporum ovale, the same organism as *P orbiculare*, may be seen in association with *Pityrosporum* folliculitis, seborrhea, and tinea versicolor. *Pityrosporum* organisms thrive in moisture and tend to grow on the skin in areas where sebaceous follicles secrete sebum. Tinea versicolor is found on the chest, upper arms, and back. Seborrhea tends to manifest on the scalp, face, and chest.

Tinea versicolor is also called pityriasis versicolor, a name that makes reference to the connection between this condition and the *Pityrosporum* species. Tinea versicolor is more closely related to seborrhea than to tinea corporis, which explains why tinea versicolor responds to therapeutic agents used to treat seborrhea and dandruff and does not respond to medicines such as griseofulvin that are used to treat tinea corporis and tinea capitis.

DIFFERENTIAL DIAGNOSIS

Vitiligo causes full depigmentation of the skin, which is distinct from the hypopigmentation that is associated with tinea versicolor. The lesions of pityriasis rosea have a fine collarette scale around their border, and a herald patch is frequently seen. Scaling usually is not a characteristic of secondary syphilis, which is more commonly associated with macules on the palms and soles. In none of these conditions are hyphae and spores visible on KOH-treated scraping samples. When results of KOH specimen analysis are inconclusive and secondary syphilis is suspected, a VDRL test is recommended.

TREATMENT

Treatment of tinea versicolor is mostly for cosmetic reasons; patients usually are asymptomatic. The mainstay of treatment is topical therapy using antidandruff shampoos. Selenium sulfide 2.5% lotion or shampoo or zinc pyrithione may be applied to the involved areas daily for 1 to 2 weeks. A typical regimen involves applying the lotion or shampoo to the involved areas for 10 to 15 minutes and then washing it off in the shower. Another method involves applying the lotion for 24 hours before washing it off. Ketoconazole 2% shampoo, used as a single application or daily for 3 days, is also safe and effective treatment.[1]

Topical antifungal creams are expensive, particularly if they are applied over large areas. For smaller areas of involvement, the topical antifungal creams that work best include ketoconazole and clotrimazole.

A single oral dose of ketoconazole (400 mg) is a more convenient method of treatment than is applying a topical preparation daily for 1 to 2 weeks. Physicians should question patients about possible preexisting liver disease and warn them about the risk of liver toxicity with its use. Although the risk of liver toxicity with a single oral dose of ketoconazole is small, it is best to remember that most often the treatment is for cosmetic reasons.

The first sign of successful treatment is the lack of scale. Sun exposure hastens the normalization of skin color.

OUTCOME

The patient did not have health insurance coverage and so chose to use an over-the-counter dandruff shampoo for treatment and to seek additional care as needed. He was told he could repeat this treatment periodically to prevent recurrence of tinea versicolor. The patient has not been seen again for this condition.

Reference

1 Lange DS, Richards HM, Guarnieri J, et al. Ketoconazole 2% shampoo in the treatment of tinea versicolor: a multicenter, randomized, double-blind, placebo-controlled trial. *J Am Acad Dermatol* 1998;39:944-950.

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High-quality slides, illustrations, and photographic prints may be mailed to:
Richard Usatine, MD; Section Editor, Med.Pix; 2000 UCLA Medical Plaza, Suite 220 Los Angeles, CA 90095-1628; Fax 310-206-0181.

Written descriptions and electronic images may be submitted to: rusatine@mednet.ucla,edu.

Note: If the patient's identity is recognizable, a signed permission form should accompany the submission materials.